

**IN THE ABSTRACT:**

Please replace the current abstract in its entirety with the following:

A prototype system having an integrated circuit including an on-chip processor and an on-chip router connected to off-chip resources via an interface. A request directing unit on the chip receives memory access requests and directs them in accordance with either one of two address maps. In one of the address maps, a first range of addresses is allocated to at least one on-chip resource and a second range of addresses is allocated to the interface. In the other memory address map, the first range of addresses is also allocated to the interface. An integrated circuit including such a request directing unit is also described, together with a method for evaluating a prototype system.